



# COLORADO

Department of Public  
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

**COLORADO DISCHARGE PERMIT SYSTEM (CDPS)  
FACT SHEET TO PERMIT NUMBER COG604000  
GENERAL PERMIT FOR DISCHARGES FROM  
HYDROSTATIC TESTING OF PIPELINES, TANKS, AND SIMILAR VESSELS  
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### I. TYPE OF PERMIT

Master General, NPDES, Surface Water and Groundwater, First Renewal, Statewide.

### II. MAJOR CHANGES FROM LAST PERMIT VERSION

The current general permit, which expired December 31, 2012 and has been administratively continued by the Water Quality Control Division (division), provides coverage for discharges from hydrostatic testing for approximately 100 facilities. This renewed general permit is needed to continue to provide coverage for a portion of these established dischargers and for new hydrostatic testing discharges. The division conducted a stakeholder process that included site visits, a pre-draft meeting held on January 29, 2015, an electronic survey, and an additional meeting held on February 9, 2015 and an additional survey both specifically for permittees currently authorized under the blanket coverage option of this permit (any entity may be granted blanket coverage under this permit when hydrostatic testing of multiple pipes, tanks, or similar vessels requiring greater than 30 permitted features will be performed, providing common permit terms and conditions are appropriate). The purpose of the stakeholder outreach was to discuss permit items the division was considering for revision and to gather stakeholder input to develop draft permit conditions. The division considered information gathered during site visits, the stakeholder input received during the meetings, and the survey responses in developing the draft permit.

The following is a list of significant changes from the previous renewal. Please see the corresponding sections of the fact sheet for additional information on the changes and the rationale for the changes.

1. The scope of the permit was revised to provide clarification of the types of activities covered and to ensure that discharges authorized under this permit meet the following conditions, as required by Regulation 61.9(2) Colorado Discharge Permit System Regulations: involve the same or substantially similar types of operations; discharge the same types of wastes; require the same effluent limitations or operating conditions; and require the same or similar monitoring.
2. This renewed permit continues to offer a blanket coverage option; however, reporting requirements for those permittees authorized under the blanket coverage option have been



- updated for efficient data collection, compilation, and review, and to aid the division in providing compliance assistance and oversight.
3. The number of permitted features has been limited to 30 permitted features per certification to allow for efficient issuance and administration of certifications. For projects requiring greater than 30 permitted features, the permit applicant may request that one certification be issued with more than 30 permitted features, the permit applicant may obtain multiple certifications for different portions of the project, or the permit applicant may request authorization under the blanket coverage option.
  4. The previous permit contained 2 effluent limitation sets - 1 set for discharges from hydrostatic testing of new equipment and 1 set for discharges from hydrostatic testing of used equipment. This renewed permit contains 4 effluent limitation sets: 1 set for discharges from discharges involving *new* equipment to *surface water* (NS), 1 set for discharges involving *used* equipment to *surface water* (US), 1 for discharges involving *new* equipment to *groundwater* (NG), and 1 for discharges involving *used* equipment to *groundwater* (UG). This approach allows the division to use greater flexibility in implementing appropriate water quality standards based on the receiving stream (surface water or groundwater) rather than implementing the most stringent standard, which may provide relief to some permittees for certain projects while still being protective of the receiving stream.
  5. Sampling is no longer required in the first and last hour of discharge, or first and last 15 minutes of a discharge for those discharges lasting less than 1 hour. This change was made in response to stakeholder concerns that discharge timing may be difficult to anticipate, that sample collection during this time may present logistical difficulties for permittees, and that samples taken at these times may not be the most representative of the discharge. This renewed permit continues to require that the permittee collect 2 samples per discharge. It is the responsibility of the permittee to determine the appropriate sampling timing to ensure collection of samples representative of the nature of the discharge. Additional samples may be collected as need to ensure that the data is representative of the nature of the discharge.
  6. Where the Water Quality Control Commission has adopted a 30-day average (chronic) water quality standard (WQS) for a parameter, a 30-day average reporting requirement and chronic effluent limitations have been incorporated into the permit in addition to the daily maximum (acute) effluent limitations and reporting requirements. Both chronic and acute standards have been incorporated into the permit to align the reporting and/or numeric effluent limitation requirement with the underlying basis for the standard.
  7. The previous permit contained an option for permit applicants to request approval to develop a Best Management Practices (BMP) Management Plan in lieu of the division incorporating numeric effluent limitations into the permit certification. This option has been removed as it was not requested by permittees during the permit cycle and there was not any interest expressed in maintaining the option in this renewed permit by stakeholders during the stakeholder process. Instead, a Control Plan requirement for all dischargers has been added as a tool for increasing compliance with permit effluent limitations and as a tool for division compliance assistance and oversight. During the stakeholder process, permittees expressed that maintaining a Control Plan is already standard industry practice.
  8. Examples of control measures have been incorporated into the fact sheet per requests received by the division during the stakeholder process.
  9. The previous permit contained one effluent limit for phosphorus based on the most stringent control regulation in the state. This renewed permit allows for the effluent limit to vary based on the control regulation requirement applicable to the particular discharge. This approach allows the division to use greater flexibility in implementing appropriate water quality requirements rather than implementing the most stringent requirement, which may provide relief to some permittees for certain projects while still being protective of the receiving stream.
  10. In compliance with the Colorado River Salinity Standards (Regulation 39) and the Colorado Discharge Permit System Regulations (Regulation 61), all permittees discharging to the Colorado River basin shall monitor for salinity in the form of total dissolved solids (TDS). The previous permit required sampling for TDS two times per discharge. Salinity reporting requirements for discharges to the Colorado River Basin have been updated in this permit to more effectively assess total salinity loading to the Colorado River Basin. All permittees discharging to the Colorado River Basin shall monitor TDS quarterly and report a quarterly average concentration.



### III. SCOPE OF THE GENERAL PERMIT

#### A. SIC Codes

Permittees authorized to discharge during the previous permit cycle were classified under the following SIC codes:

1623 Water, Sewer, Pipeline, and Communications and Power Line Construction  
1629 Heavy Construction, Not Elsewhere Classified  
1799 Special Trade Contractors, Not Elsewhere Classified  
4610 Pipe Lines (No Natural Gas)  
4619 Pipelines, Not Elsewhere Classified  
4922 Natural Gas Transmission

This permit may cover discharges from permit applicants classified under additional SIC codes, as determined appropriate by the division.

#### B. Sector Description

The General Permit for Discharges from Hydrostatic Testing of Pipelines, Tanks, and Similar Vessels (permit) was first signed and issued September 25, 2007, and became effective January 1, 2008. Per the rationale issued with the permit in 2007, the permit was developed to provide alternative permit coverage for hydrostatic testing of gas or petroleum pipelines, storage tanks, and similar vessels, which were previously covered (among other types of discharges) under the Minimum Industrial Discharge (MINDI) general permit (COG60000). During the initial permit cycle, hydrostatic testing and flushing discharges from sectors other than the gas or petroleum sectors were covered, including potable water providers, fire protection specialists, etc. During the renewal process, the division evaluated and sought stakeholder input on which sectors' discharges appropriately fit into the permit based on similarity of activity, similarity of discharge and monitoring requirements, as well as whether alternative discharge coverage options exist. The revised scope of this renewed permit is discussed in section C below by type of activity evaluated by the division.

#### C. Activities covered

This permit may cover discharges of hydrostatic test water. Hydrostatic test water means water placed in pipelines, tanks, or similar vessels and raised to greater than atmospheric pressure in order to check for leaks and/or the structural integrity of these facilities. For the purposes of this permit, hydrostatic test water also includes water placed in pipelines, tanks, or similar vessels to test for leaks without raising pressure to above atmospheric pressure. Additionally, for the purposes of this permit, hydrostatic test water may include water placed in pipelines, tanks, or similar vessels for the purpose of installation or transportation of these facilities.

This permit may cover:

- Intermittent discharges; or
- Continuous short-term discharges.

The definitions of "short-term" and "intermittent" are included in the definitions section of the permit. This permit may cover discharges which meet the definition of intermittent (i.e. not continuous), or may cover discharges which are continuous, as long as they are short-term, meaning that they do not exceed 2 years in length.

Discharges authorized pursuant to this permit are expected to be short-term and intermittent, and therefore shall not be considered to result in significant degradation of reviewable waters. As a result, Antidegradation limits are not applied in this permit. For any discharge resulting in significant degradation, alternative permit coverage may be sought.

The following types of discharges were granted permit coverage in the previous permit cycle and may continue to be covered consistent with this renewed permit for the reasons identified below:

1. Oil and Gas Hydrostatic Testing Discharges

The division will continue to provide permit coverage for hydrostatic testing discharges from the oil and gas sector.

2. Other activities

The division will continue to provide permit coverage for eligible hydrostatic testing discharges from activities other than oil and gas sector activities. The division may determine that a discharge is eligible for permit coverage when the activity, the pollutants associated with the activity, and the effluent limitations and monitoring requirements are the same or substantially similar to other discharges granted permit coverage.

**D. Limitations on Coverage**

The following discharges are specifically excluded from coverage under this renewed permit:

1. Fire suppression systems (discharges from testing, maintenance, flushing, and draining of systems)

Discharges from the testing, maintenance, flushing, or draining of existing fire suppression systems were provided permit coverage under this general permit during the previous permit cycle, however this renewed permit does not authorize these discharges. The division's Clean Water policy 5 (CW5), *Discharge from Water-based Fire Suppression Systems* and the accompanying guidance provide information on allowable fire suppression system discharges per that policy. Fire suppression system discharges not addressed by CW5 are not eligible for coverage under this renewed permit. The division has determined that these discharges are not suitable for general permit coverage based on their chemical content, pollutants associated with the source water, and/or contamination with other pollutants of concern which may not be adequately treated in the field to comply with numeric effluent limitations.

Discharges from hydrostatic testing and flushing of new or replaced connections from water mains to fire suppression systems, while not addressed by CW5, may be allowable in accordance with the division's low risk discharge guidance for discharges of potable water.

2. Flushing activities

Discharges from flushing activities are not authorized by the permit. Flushing activities are often associated with cleaning. Discharges from cleaning activities are prohibited per the permit (Part 1.A.2.e.iii). Discharges from cleaning activities are excluded from coverage under this permit because they could result in the discharge of concentrated pollutants. The intent of the permit is to cover discharges of wastewater that contain only residuals (i.e. low concentrations) of the materials of which the piping is constructed and/or residuals of the contents of the pipe after the bulk of pollutants have been otherwise removed. The permit does not cover discharges of highly concentrated industrial wastes, which should be isolated and properly disposed, and not discharged to waters of the state.

3. Reclaimed water (discharges from used reclaimed water systems and activities using reclaimed water)

Reclaimed water is domestic wastewater that has received secondary treatment by a domestic wastewater treatment works and such additional treatment as to enable the wastewater to meet the standards for approved uses in accordance with Reclaimed Water Control Regulation

84. Hydrostatic testing activities involving used reclaimed water pipes, tanks, or similar vessels are not eligible for coverage under the permit. Hydrostatic testing activities utilizing reclaimed water are not eligible for permit coverage under this renewed permit. Reclaimed water is treated domestic wastewater. As such, reclaimed water and used reclaimed water systems may contain pollutants of concern other than those typically associated with hydrostatic testing of pipes, tanks, and similar vessels. Conducting a reasonable potential analysis for each of the pollutants of concern which may be associated with reclaimed water or used reclaimed water systems is beyond the scope of this general permit. These discharges may be discharged to the publically owned treatment works (POTW) with prior permission from the POTW. Where access to a POTW is not available, alternative permit coverage may be sought.

#### 4. Potable Water Distribution System Discharges

Discharges of potable water from potable water distribution systems (hydrostatic testing, flushing, etc.) may not be covered under the permit. Note that this is not the same type of discharge as discharges from Water Treatment Facilities, which may be authorized under the *CDPS General Permit for Water Treatment Plants Not Discharging to Waters Designated Habitat for Threatened and Endangered Species COG641000*. The Low Risk Discharge Guidance for Discharges of Potable Water (guidance) is an alternative discharge option for discharges of potable water from potable water distribution systems. The guidance was developed in accordance with the division's Low Risk Discharge Policy (WQP27) and provides an alternative discharge option for potable water system discharges which meet the conditions outlined in the guidance document. Control measures should be implemented as necessary to meet the conditions of the guidance.

If an activity does not meet the requirements of the guidance, an alternative disposal method must be utilized, for example, discharge to a POTW, with prior permission of the POTW. During the public notice period for the draft permit, the division received comments indicating that stakeholders (utilities) were opposed to inclusion of coverage for discharges of potable water from potable water distribution systems under this general permit due to concerns that inclusion implied the need for utilities to obtain permit coverage and that potable water distribution system discharges would be subject to multiple general permits over time. Based on stakeholder input, discharges of potable water from potable water distribution systems have been excluded from coverage under this general permit.

5. Discharges that would meet any of the following conditions at the time of the effective date of the permit authorization are not eligible for coverage under this permit and must apply for coverage under another general permit or under an individual permit:
  - a. The discharge(s) is to receiving waters designated as "outstanding waters." The division did not receive any applications for discharges to outstanding waters during the previous permit cycle. Therefore discharges to outstanding waters were not included on the basis that there is not a demonstrated need for permit coverage in these areas.
  - b. Discharges solely to groundwater if such discharges are subject to direct regulation by the EPA or by implementing agencies under Section 25-8-202(7) of the Water Quality Control Act or Senate Bill 181. This exclusion does not apply to discharges to surface waters, including discharges to groundwater that are tributary to surface waters and for which the division determines that the requirements of Regulation 61 applicable to surface waters apply.
  - c. Discharges from cleaning activities.
  - d. Discharges containing solid animal or food waste, vegetative wastes (grass, leaves, manure, garbage, etc.), or any floating solids or visible foam other than in trace amounts.

#### IV. PERMITTED FEATURES AND LIMIT SETS

##### A. Limit Sets

There are five (5) limits included in the new permit. Each of the four (4) following limit sets is applicable to the types of discharges based on activity and receiving stream as indicated below:

- Discharges from activities involving *new* equipment to *surface water* (permit table B.2.a);
- Discharges from activities involving *new* equipment to *groundwater* (permit table B.2.b);
- Discharges from activities involving *used* equipment to *surface water* (permit table B.2.c);
- Discharges from activities involving *used* equipment to *groundwater* (permit table B.2.d); and

The fifth limit set applies to discharges occurring within the Colorado River Basin:

- Discharges from activities involving *new* or *used* equipment to the *Colorado River Basin* (permit table B.2.e).

The limit sets will be identified in the certification by the designation identified in Table 1 below.

**Table 1. Designation of limits sets in permit certification**

Activity for which limit set will be applied	Designation of limit set
Discharge from activities involving <i>new</i> equipment to <i>surface water</i>	NS
Discharge from activities involving <i>new</i> equipment to <i>groundwater</i>	NG
Discharge from activities involving <i>used</i> equipment to <i>surface water</i>	US
Discharge from activities involving <i>used</i> equipment to <i>groundwater</i>	UG
Discharge from activities involving <i>new</i> or <i>used</i> equipment to the <i>Colorado River Basin</i>	CR

The limit set designations are incorporated into this renewed permit and will be incorporated into permit certifications when naming permitted features. For example, the first physical discharge location included in a certification authorizing discharge(s) to surface water from hydrostatic testing of new equipment would be an external outfall designated as permitted feature 001-NS.

In the previous permit term, the permit contained 2 limits sets, 1 for discharges from testing of new equipment and 1 for discharges from testing of used equipment. This renewed permit has incorporated 2 additional permitted features for discharges to groundwater for the reasons described in the Discharges to Groundwater section of this fact sheet.

##### B. Blanket Coverage

This renewed permit will continue to offer the option of blanket coverage. Blanket coverage is the authorization of activities involving multiple pipes, tanks, or similar vessels within a specified geographic area provided that common permit terms and conditions are appropriate and provided that the division grants such authorization in the permit certification. During the previous permit term, the option of applying for blanket permit coverage was available for entities performing hydrostatic testing of multiple pipes, tanks, or similar vessels provided that common permit terms and conditions adequately addressed the discharges. The physical boundaries of the blanket approval were incorporated into the certification. Four (4) entities were granted blanket coverage for discharges occurring within the boundaries of the State. The exact latitude and longitude of discharges are not required to be submitted with the permit application for those applicants requesting blanket coverage since that information is not necessarily known at the time of application. Since the division did not have an exact latitude and longitude for these discharge locations, compliance data for these entities could not be uploaded into the EPA database utilized by the division, the Integrated Compliance Information System (ICIS). Integration of compliance data into ICIS is critical because the database is used by the division for tracking purposes and for compliance oversight. The entities that obtained blanket permit coverage during the previous permit cycle have extensive systems of pipelines within

the state and may face short timeframes (less than 30 days) for testing repairs based on Department of Transportation requirements.

During the permit renewal process, the division worked with the entities granted blanket permit coverage in order to understand their processes and concerns. The division is seeking to balance the needs of these permittees with the need to have accurate and complete discharge data in ICIS. The division's preference is that all permitted features are identified by latitude and longitude with the permit application. Recognizing that this is not always practical or possible, the division has modified the blanket coverage option as described below to allow all discharge data to be integrated into ICIS, even without a latitude and longitude provided prior to the discharge event. The division will consider on a case-by-case basis whether blanket coverage is appropriate based on criteria determined by the division which may include the nature of the permitted activity, the timeframes for completion of the activity, the number of permitted features associated with the proposed activity, etc. Blanket coverage may be considered for planned pipeline expansion projects with fewer than 30 permitted features required over the permit term on a case-by-case basis when requested by the permit applicant and when the permit applicant shows good cause why blanket coverage is needed. However, blanket coverage is generally appropriate for covering activities with large numbers of permitted features, or where permit applicants are unable to identify the latitude and longitude of the physical discharge locations at the time of submitting the permit application. The permitted features in the certifications authorizing blanket coverage are then essentially placeholders which will be assigned at the time of discharge in the field and the exact latitude and longitude of the discharge locations will be reported in the comments section of the Discharge Monitoring Reports (DMRs).

For those permittees granted blanket coverage, their certification will include limit sets based on the proposed types of activities. There are 4 limit sets included in the new permit, as shown in Table 1 (NS, NG, US, UG). The number of permitted features provided to the permittee will be based on the maximum number of discharges anticipated for a given month for a type of activity during the permit term. For instance, if a permittee anticipates that a maximum of 10 discharges from hydrostatic testing of used equipment to groundwater will occur in any given month during the permit cycle, 10 permitted features for that limit set will be provided in the certification (001-UG through 010-UG). These permitted features may be used at different locations from month to month, but may not be used at more than one physical location per month. For instance 001-UG could be used at one physical location in April and a separate physical location in May, as long as the locations are within the approved area as specified in the certification.

The objective of this new approach is to generate adequate DMRs to allow data for the discharge(s) from each distinct physical location to be reported on a separate DMR so that data can be uploaded into ICIS. If there is not a discharge for a given permitted feature during a reporting period, the permittee shall submit the DMR marked "no discharge." The permittee must indicate the latitude and longitude of the discharge in the comments section of the DMR and must record the latitude and longitude and the receiving stream in a discharge log or in the Control Plan.

Table 2 offers additional illustration of the new process. In the examples in the table, the entity should request in the permit application the number of permitted features indicated in the final row of the table based on the number of discharges, the location of the discharge (surface water or groundwater), and the condition of the equipment (new or used) being tested.

**Table 2. Identifying the appropriate number of permitted features for permit applications requesting authorization of blanket coverage**

Month	Number of discharges from activities involving new equipment to surface water (NS)	Number of discharges from activities involving new equipment to groundwater (NG)	Number of discharges from activities involving used equipment to surface water (US)	Number of discharges from activities involving used equipment to groundwater (UG)
January	0	1	0	2
February	1	1	0	0

Month	Number of discharges from activities involving new equipment to surface water (NS)	Number of discharges from activities involving new equipment to groundwater (NG)	Number of discharges from activities involving used equipment to surface water (US)	Number of discharges from activities involving used equipment to groundwater (UG)
March	2	1	1	1
April	1	3	0	1
May	0	1	0	1
June	0	1	0	4
July	0	3	3	1
August	5	3	2	1
September	2	3	2	1
October	0	0	0	0
November	1	1	0	0
December	1	2	0	0
Total number of discharges (annual)	13	11	8	12
Maximum Number in any given month	5	3	3	4
Permitted features requested*	5 permitted features requested: 001-NS through 005-NS	3 permitted features requested: 006-NG through 008-NG	3 permitted features requested: 009-US through 011-US	4 permitted features requested: 012-UG through 015-UG

Note that the permitted feature is the physical discharge location, therefore, even permitted features with different limit sets will be numbered in ascending order and numbers cannot be repeated since they are associated with a unique physical location. If the permittee in the above example's first discharge for a given month is from activities involving used equipment to surface water, that discharge would be reported on the DMR for 009-US. Subsequent discharges involving used equipment to surface water during the same month would be reported on the DMRs for 010-US and 011-US, assigned in chronological order.

The entity's certification must contain at least as many permitted features, with the appropriate limit sets (NS, NG, US, or UG), as there are discharges from distinct physical locations during a calendar month. Additional permitted features may be requested as needed. Excess permitted features may be terminated using a modification request form, if the permittee finds that they will not need those permitted features during the permit cycle.

The permittee shall provide the latitude and longitude for each discharge in the comments section of the DMR.

When blanket coverage is authorized, the most stringent applicable water quality standard for those parameters with a reasonable potential to be present in the discharge, will be implemented as the numeric effluent limitation in the certification. If statewide blanket coverage is authorized, monitoring, numeric effluent limitations, and reporting requirements for discharges to control regulation basins will be included in the certification. This includes the more stringent Phosphorus numeric effluent limitation of 0.05 mg/l and the reporting requirements for discharges to the Colorado River Basin included in permit table B.2.e.

### C. Number of Permitted features

The division is limiting the number of permitted features per certification to 30 in order to keep administration manageable. Projects requiring greater than 30 permitted features during the permit term may be split into additional separate certifications, or may be granted blanket coverage where appropriate. The permit applicant may request more than 30 permitted features in the same certification and the division may grant greater than 30 permitted features in one certification when the permit applicant demonstrates a need which outweighs the administrative burden.

## V. DISCUSSION OF NUMERIC EFFLUENT LIMITATIONS

This section discusses changes to Numeric Effluent Limitations in this renewed permit from the previous permit cycle.

### A. Technology Based Limitations

1. Federal Effluent Limitation Guidelines - There are no Federal Effluent Limitation Guidelines for this category of discharge.
2. Regulation 62: Regulations for Effluent Limitations - These Regulations include effluent limitations that apply to all discharges of wastewater to State waters. These regulations are applicable to the discharge from hydrostatic testing activities.
  - a. Total Suspended Solids - The Division's current permit includes numeric technology based limits for TSS based on Regulation 62. These limits continue to apply to these discharges. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.
  - b. Oil and Grease - The oil and grease limitations from the Regulations for Effluent Limitations are applied as they are the most stringent limitations. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.
  - c. pH - The pH limitation specified in the Regulations for Effluent Limitations is not the most stringent and thus is not used. pH limitations for discharges to unclassified surface waters are generally 6.0-9.0, per Regulation 62. However, to maintain consistent effluent limitations under the general permit, the permit includes a pH limitation of 6.5-9.0 for all discharges to surface waters.
  - d. Benzene - Analysis and limitations for Benzene will be included in the permit certification for discharges from hydrostatic testing operations involving used oil and gas equipment where the division has made a qualitative reasonable potential determination that Benzene may be present in the discharge based on the material(s) previously stored in or transported by the equipment. Benzene is a common component of petroleum fuels. Based on EPA's Model National Pollutant Discharge Elimination System (NPDES) Permit for Discharges Resulting from the Cleanup of Gasoline Released from Underground Storage Tanks (June 1989) and the observed performance of Benzene control equipment, EPA has set a technology based limit for Benzene of 5 µg/l (daily maximum). This limit is based on the typical removal efficiency of 99.5% or better for Benzene using a commercially available air stripper unit. Given the high volatility of Benzene, air stripping is an efficient and cost effective wastewater treatment technology. Per EPA's 1989 model permit, air stripping is more cost effective than use of granulated activated carbon, which the division has observed permittees utilize in the field. Therefore, the division is implementing a best professional judgment (BPJ) based technology based limit in this general permit for Benzene of 5 µg/l. Although the previous hydrostatic testing general permit did not contain the BPJ Benzene limitation, the division has a history of

implementing the BPJ limit for hydrostatic testing discharges, for instance, in the CDPS General Permit Minimal Discharge (MinDi) permit issued in 1995.

- e. **Total BTEX** - Analysis and limitations for total BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes) will be included in the permit certification for discharges from hydrostatic testing operations involving used oil and gas equipment where the division has made a qualitative reasonable potential determination that BTEX may be present in the discharge based on the material(s) previously stored in or transported by the equipment. The four alkyl benzene volatile organic compounds (benzene, toluene, Ethylbenzene, and the ortho, para, and meta xylenes) are common constituents of petroleum fuels. Based on EPA's Model NPDES Permit for Discharges Resulting from the Cleanup of Gasoline Released from Underground Storage Tanks (June 1989) and the observed performance of BTEX control equipment, EPA has set a technology based limit for total BTEX of 100 µg/l (daily maximum). This limit is based on the typical removal efficiency of 99.5% or better for BTEX using a commercially available air stripper unit. Given the high volatility of many of the soluble constituents in hydrostatic testing discharges from testing of used oil and gas equipment, air stripping is an efficient and cost effective wastewater treatment technology. Per EPA's 1989 model permit, air stripping is more cost effective than use of granulated activated carbon, which the division has observed permittees utilize in the field. Therefore, the division is implementing a best professional judgment (BPJ) based technology based limit in this general permit for BTEX at 100 µg/l. Although the previous permit did not contain the BPJ total BTEX limitation, the division has a history of implementing the total BTEX BPJ limit for hydrostatic testing discharges, for instance, in the CDPS General Permit Minimal Discharge (MinDi) permit issued in 1995.

## B. Water Quality-Based Effluent Limitations

1. **Flow Limits** - A flow limitation will be included in the permit certification, as required by 5 CCR 61.8(2)(i). A daily maximum (acute) flow limitation is implemented in this general permit as opposed to a 30 day average flow limitation based on the short-term nature of the permitted activities. Additionally, the acute flow limitation, measured in million gallons per day (MGD), more closely aligns with the shorter term treatment associated with these intermittent and short duration discharges. The acute flow limit will be equal to the maximum flow rate provided in the permit application. Permit applicants requesting blanket coverage must provide a maximum flow rate with their permit application. If a project may exceed the maximum flow rate provided with the permit application, the permittee shall request a modification from the division and receive division approval and a modified permit certification prior to increasing discharge flow above the flow indicated in the permit application.

The permittee must report a total monthly flow to allow the division to assess total pollutant loading from the permitted activity.

As required by 5 CCR 62.5(7), the flow-measuring method or device used by the permittee must indicate values within ten percent of the actual flow being measured. The method for measuring flow rates authorizes estimates. Permittees granted blanket permit coverage must document the method for determining flows in the Control Plan or in a discharge log.

2. **E. coli and Total Coliforms** - Analysis and limitations for *E. coli* and Total Coliforms will be included in the permit certification for discharges from hydrostatic testing operations involving replacement, repair, or installation of sanitary sewer lines where the division has made a qualitative reasonable potential determination that *E. coli* or Total Coliforms may be present in the discharge. The division will make a determination that reasonable potential exists if the sewer lines being tested are used.
3. **Iron** - During the previous permit cycle, a total recoverable iron numeric effluent limitation was applied only for testing of used pipes, tanks, or similar vessels. However, during the permit cycle, high levels of dissolved iron were observed from discharges involving testing of new equipment as well as used equipment. Total recoverable iron limits are in place for discharges



to surface water because discharge of iron to a receiving stream may cause aquatic life impacts. Therefore, a limit for total recoverable iron will be included for all certifications involving a discharge to surface water where the division has determined that there is qualitative reasonable potential for iron to be added to the discharge by the equipment being hydrostatic tested or flushed.

Dissolved iron is a secondary drinking water standard which may create aesthetic impacts to drinking water supplies. Therefore all discharges to a water supply or where a site specific standard has been adopted, and where the division has made a qualitative reasonable potential determination that dissolved iron may be added to the discharge by the equipment being hydrostatic tested or flushed, shall include a limit for dissolved iron.

In the previous permit, a dissolved numeric effluent limitation of 300 µg/l was implemented for all discharges. The division is implementing the flexibility within this renewed permit to evaluate whether the surface water receiving stream is designated as a water supply and to take into consideration applicable site specific dissolved iron water quality standards when determining the dissolved iron effluent limit to be applied in the certification. Where the surface water receiving stream is used as a water supply, the limitation added to the certification will be either:

- a. Existing quality as of January 1, 2000; or
- b. 300 µg/l.

Provided, that if the existing quality of these constituents in such surface waters as of January 1, 2000 is affected by an unauthorized discharge with respect to which the Division has undertaken an enforcement action, the numerical standards shall be the ambient conditions existing prior to the unauthorized discharge or the above table value criteria, whichever is least restrictive.

Data generated subsequent to January 1, 2000 shall be presumed to be representative of existing quality of January 1, 2000, If the available information indicates that there have been no new or increased sources of these pollutants impacting the segment(s) in question subsequent to that date.31.11(6).

A dissolved iron numeric effluent limitation will be applied to all discharges to groundwater where the division has made a qualitative reasonable potential determination that the activity or source water may contribute iron to the discharge because groundwater within the state is actively or potentially used as a drinking water supply.

4. Total Residual Chlorine - Analysis and limitations for Total Residual Chlorine (TRC) will be added to the permit certification for discharges to surface water when there is an applicable water quality standard assigned to the receiving stream and when the division has made a reasonable potential determination that chlorine may be present in the discharge. The division's reasonable potential determination will be based on the use of potable source water or approved chemical addition.
5. Total Phosphorus - As noted in the general permit, the division will implement effluent limitations and monitoring conditions in the certification in accordance Phosphorus Control Regulations requirements (Regulations, 71, 72, 73, and 74).
6. Total Dissolved Solids - For all discharges to groundwater, a numeric effluent limitation for Total Dissolved Solids (TDS) of 400 mg/l will be included in the permit certification, per Regulation 41, the Basic Standards for Groundwater.

Quarterly monitoring for salinity, measured as TDS, and quarterly average reporting of TDS, will be included in the permit certification for all discharges to the Colorado River Basin. Total flow must be reported for all discharges. Reporting of quarterly average TDS values and total flow is

necessary to effectively assess the salinity loading to the Colorado River Basin, as required per Regulation 39, Colorado River Salinity Standards. The relevant Colorado River Basin Salinity Control Forum (Forum) NPDES Permits Explanation Codes will be incorporated into the permit certification for permittees discharging to the Colorado River Basin. NPDES permits are reviewed under two different criteria under Forum policy; these being municipal and industrial. Forum industrial criteria requires that no industrial user discharge more than 1.00 ton/day TDS. The NPDES Explanation Codes provide an explanation of the current status of NPDES permits.

7. Benzene - Analysis and limitations for Benzene will be included in the permit certification for discharges from testing of used gas or petroleum equipment where the division has made a qualitative reasonable potential determination that Benzene may be in the discharge based on the material(s) previously stored in or transported by the equipment. For discharges to surface water, the most stringent Benzene surface water quality 30-day average (chronic) standard from Regulation 31 will be implemented in the certification in order to maintain a streamlined administrative process (one certification can often have many receiving streams). The Benzene Water Quality Standard will be implemented as a chronic numeric effluent limitation in addition to the BPJ Benzene daily maximum (acute) limitation (see V.A.2.d of the fact sheet for additional information on the BPJ Benzene daily maximum).
8. Other Pollutants (Metals, Organics, Inorganics, and Radioactive parameters) - Other pollutants, including metals, organics, inorganics, and radioactive parameters, may be included in the certification to discharge where the division determines that there is qualitative reasonable potential for such pollutants to be present in the discharge. This is not a change from the previous permit term. A qualitative reasonable potential determination may be made based on the source water, chemicals used, materials being tested or flushed, what the equipment has been used for, or any other identified source of a pollutant which may be discharged to waters of the State from the activity. For instance, in the previous permit cycle, it was anticipated that steel equipment associated with the gas or petroleum sector would be tested, however; there were circumstances where other types of material (not steel) were tested and contributed pollutants which would not typically be encountered when testing steel. The division has determined to continue to provide coverage for discharges from testing of these other types of materials as long as the WQS can be met for any pollutants being contributed to the discharge. Having the ability to incorporate additional pollutants into the certification allows for coverage of a broader range of activities under the permit.

During the previous permit term, there were activities covered under the permit where the source water was withdrawn from one location and discharged to a different receiving stream. In some cases, this resulted in transfer of pollutants from an impaired stream to a non-impaired stream. Therefore, for activities where source water is withdrawn from an impaired waterway and discharged to a waterway not impaired for the same parameter as the source water, the division may include limits for that parameter in the certification.

If the source water is discharged to the receiving stream from which it was withdrawn, the division may choose to only consider those pollutants being contributed or concentrated by the activity. This may be the case for discharges where the following criteria are met: the activity in no way modifies the intake water character for the pollutant of concern (i.e. either by increasing pollutant concentration through evaporation or by adding pollutant mass from internal sources), where the point of diversion is on the same waterbody segment as the point of discharge, and where the timing of the discharge is such that the discharge does not create a water quality standards exceedance that would not have occurred otherwise.

9. Effluent Limitations for Discharges to Groundwater - In the previous permit cycle, surface water standards were implemented for all discharges to groundwater except for those discharges to aquifers for which the Commission has adopted site specific use classifications and numeric standards in Regulation 42. In order to streamline the permitting process, separate limit sets have been incorporated into this renewed permit for discharges to groundwater. The limit sets for discharges to groundwater in tables B.2.b and B.2.d are based on the most stringent standards in Regulation 41. After the effective date of this renewed permit, the division will



not evaluate whether the discharge is to an aquifer for which site specific use classifications and numeric standards have been adopted in Regulation 42. Since the limit sets are based on the most stringent standards in Regulation 41, these standards will be protective of aquifers for which use classifications and numeric standards have been adopted in Regulation 42. This approach is consistent with the division's other general permits and the division anticipates that having the flexibility to incorporate limits related to whether the discharge is to surface water or groundwater will provide relief to dischargers in some cases while remaining protective of the receiving water, whether it be groundwater or surface water. The more stringent pH limit of 6.5-8.5 standard units will be implemented for discharges to groundwater.

10. 30-Day Average Reporting Requirement - During the previous permit cycle, permittees were required to comply with a daily maximum numeric effluent limitation but 30-day average numeric effluent limitations were not implemented in the previous permit cycle. The division has incorporated 30-day average numeric effluent limitations for parameters for which an applicable chronic water quality standard exists. In the previous permit cycle, the more stringent chronic water quality standard was applied as a daily maximum numeric effluent limitation for certain parameters. For instance, during the previous permit cycle, permittees were required to comply with a daily maximum Total Suspended Solids numeric effluent limitation of 30 mg/l. In this renewed permit, addition of 7-day and 30-day average numeric effluent limitations will allow the division to implement a 7-day average numeric limit of 45 mg/l and a 30-day average numeric limit of 30 mg/l. This will allow permittees to average the samples collected during a discharge to meet the more stringent 30-day limitation. The discharges authorized under this permit are expected to be short-term in nature; however, adding the 30-day average reporting requirement allows implementation of a less stringent daily maximum limit in some cases. This approach also provides the permittee the opportunity to collect additional samples where a single sample may exceed the more stringent chronic numeric effluent limitation and average the sample results in order to comply with the 30-day average.

During the permit renewal process, stakeholders expressed concern that although a minimum of two samples are collected and analyzed for each permitted feature during a reporting period, if one of the samples exceeded the daily maximum numeric effluent limitation, the result for that sample would be the only value reported to the division on the DMR. The division agrees that reporting of a daily maximum numeric effluent limitation only does not necessarily show an accurate picture of the overall nature of the discharge for the reporting period for that permitted feature. Daily maximum numeric effluent limitations are implemented in the permit based on the WQS of the receiving stream, and therefore discharges are not allowed to exceed the daily maximum numeric effluent limitation at any time. However, incorporating reporting and numeric effluent limitations for chronic standards will enable the division to more effectively evaluate the overall nature of the discharge.

#### C. Additional Effluent Limitations

Duration of Discharge - Consistent with EPA methodology, the division has incorporated a reporting requirement for discharge duration, reported in total days in which a discharge occurred during the reporting month. Reporting of discharge days helps to assess loading for intermittent discharges occurring within a monitoring period where a discharge may not occur each day.

#### D. Monitoring and Reporting Frequency

As indicated in Tables B.2.a, B.2.b, B.2.c, and B.2.d, monitoring is required two (2) times per discharge, with the exception of oil and grease grab sampling, which is required only when an oil sheen or floating oil is observed. In the previous permit term, sampling was required in the first and last hour of discharge, or first and last 15 minutes of a discharge for those discharges lasting less than 1 hour. This sampling requirement has been updated in the renewed permit in response to stakeholder concerns that discharge timing may be difficult to anticipate and that sample collection during these times may present logistical difficulties for permittees. This renewed permit continues to require that

the permittee collect two (2) samples per discharge. It is the responsibility of the permittee to determine the appropriate sampling timing to ensure collection of samples representative of the nature of the discharge. If the discharge maintains a consistent pollutant concentration throughout, the samples should be spaced appropriately based on time. Permittees are encouraged to use visual assessment and field test kits to evaluate the consistency of the discharge. Additional samples may be collected as need to ensure that the data is representative of the nature of the discharge. Per stakeholder request, a definition of 'representative' has been incorporated into the definitions section of the permit.

The division has determined that two times per discharge is an appropriate monitoring frequency for the types of discharges covered under this permit due to their short-term nature and due to some expected variability of pollutant concentration during the discharge.

As indicated in Table B.2.e, monitoring for TDS is required quarterly for discharges to the Colorado River Basin. Total flow reporting and quarterly TDS reporting are required to enable the division to assess total salinity loading to the Colorado River Basin, consistent with Regulation 39.

Facilities authorized under this general permit must submit Discharge Monitoring Reports (DMRs) on a monthly basis to the division. These reports should contain the required summarization of the test results for all parameters and monitoring frequencies shown in Part I.B of the permit. See part I.E.1 for additional information on submitting DMRs. The division has determined that submission of DMRs on a monthly basis is appropriate for the types of discharges covered under this permit due to their short-term nature.

#### E. Water Quality Regulations, Policies, and Guidance Documents

1. Antidegradation - As stated in The Basic Standards and Methodologies for Surface Water, Section 31.8, an antidegradation (AD) analysis is required for all discharges to waters designated "reviewable", except in cases where the regulated activity will result in only temporary or short-term changes in water quality. Therefore, short-term and intermittent discharges will be considered a temporary impact and exempted from the AD review. This general permit only provides coverage for discharges that are short-term and intermittent; therefore the discharges are exempt from AD review.
2. Antibacksliding - Since the short-term and intermittent nature of the discharges authorized pursuant to this permit satisfies the antidegradation based considerations, in accordance with the Antidegradation Guidance, the antibacksliding requirements in Regulation 61.10 have been met.
3. Determination of Total Maximum Daily Loads (TMDLs) - Upon reissuance of the renewal certifications and for new permit applications under this revised general permit, the division will assess whether or not any permitted facility discharges to segments for which a TMDL has been completed. The division has included a provision in the general permit that authorizes the inclusion of additional effluent limits and other terms and conditions in a certification for discharges to segments for which a TMDL has been completed. The determination whether compliance with numeric effluent limitations will be required will be made on a case-by-case basis.
4. Determination of Discharges to 303(d) Listed Waters - Upon reissuance of the renewal certifications and for new permit applications under this revised general permit, the division will assess whether or not any permitted facility discharges to segments on the 303(d) list of impaired waters. The division has included a provision in the general permit that authorizes the inclusion of additional effluent limits and other terms and conditions in a certification for discharges to segments that are on the 303(d) list of impaired waters. The determination whether compliance with numeric effluent limitations will be required will be made on a case-by-case basis.

5. Colorado Mixing Zone Regulations - For this general permit, mixing zone regulations will not apply for discharges as all limitations are assigned as end of pipe limits based on the Water Quality Standards and Technology Based Limitations.

The rationale for not applying mixing zone regulations is due to division resource limitations and the time required to conduct a thorough analysis of the receiving stream and its assimilative capacity. This level of analysis is more appropriate for the individual permit process in order to include public notice and comment opportunities. Not applying the mixing zone regulations is consistent with the previous iteration of the permit.

6. Threatened and Endangered (T&E) Species - T&E habitat are areas designated as critical habitat for threatened and endangered species in accordance with the federal Threatened and Endangered Species Act. The US Fish and Wildlife Service and the division have entered into a Memorandum of Agreement (MOA) regarding discharges to federal T&E waters. In this MOA, a permittee that discharges to a T&E water may have additional constraints placed upon the discharge. These constraints may include accepting end-of-pipe limitations (no dilution), moving the discharge point to a different location, or using a diffuser to obtain instantaneous mixing of the effluent and the receiving water. This last option may allow for a portion of the available assimilative capacity (dilution) to be incorporated into the permit. However, as this is a general permit, all limitations are imposed as end-of-pipe limits, and therefore, the first option is met. Generally, it will be assumed that the end-of-pipe limitations will satisfy the MOA, and no further consideration is needed. On a case-by-case basis, additional constraints may need to be evaluated.
7. Economic Reasonableness Evaluation - Section 25-8-503(8) of the revised (June 1985) Colorado Water Quality Control Act required the division to "determine whether or not any or all of the water quality standard based effluent limitations are reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons, and are in furtherance of the policies set forth in sections 25-8-192 and 25-8-104."

The Colorado Discharge Permit System Regulations, Regulation No. 61, further define this requirement under 61.11 and state: "Where economic, environmental, public health and energy impacts to the public and affected persons have been considered in the classifications and standards setting process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

- a. A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or
- b. In the case of a continuing discharge, additional information or factors have emerged that were not anticipated or considered at the time of the classification and standards rulemaking."

The evaluation for this permit shows that the Water Quality Control Commission, during their proceedings to adopt the basin regulations, considered economic reasonableness.

Furthermore, no new information has been presented regarding the classifications and standards. Therefore, the water quality standard-based effluent limitations of this permit are determined to be reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104. If a party that desires coverage under this general permit disagrees with this finding, pursuant to 61.11(b) (ii) of the Colorado Discharge Permit System Regulations, they should submit all pertinent information to the division during the public notice period.

## VI. ADDITIONAL TERMS AND CONDITIONS

### A. Control Plan

All permittees shall develop and implement a Control Plan or plans as outlined in Part I.C.1.a. Additionally, those permittees granted blanket coverage shall maintain records of all discharges as specified in Part I.C.1.b. The required information may be documented either in the permittee's Control Plan or in a separate discharge log. Those permittees not granted blanket coverage are not required to maintain a discharge log.

In the previous permit term, permit applicants had the option of requesting to develop a BMP Management Plan in lieu of numeric effluent limitations if the discharge met certain criteria. No permittees utilized this option and none expressed interest in having this option in the renewed permit during the stakeholder process, therefore, the optional BMP Management Plan has not been incorporated into this renewed permit.

In the past, the division has used the term best management practices, or BMPs, to refer to measures taken to achieve permit compliance. The division has adopted the term control measures in preference of BMPs because it encompasses not only practices, but other measures such as treatment systems, physical structures, etc.

The permittee shall maintain a Control Plan for each type of permitted activity [i.e. discharges from new equipment to surface water (NS), discharges from used equipment to surface water (US), discharges from new equipment to groundwater (NG), and discharges from used equipment to groundwater (UG)] and shall document the required information for each type of activity. A Control Plan is required for each type of activity because the division felt that control measures for similar activities would be similar enough to be covered by the same Control Plan. Additionally, the division determined, for this general permit, requiring a separate control plan for each physical discharge location created a large administrative burden on permittees without a commensurate increase in environmental protection; however, permittees may choose to maintain a separate control plan for each physical discharge location as needed to ensure permit compliance.

A review of compliance data for the previous permit term showed a high level of noncompliance with effluent limitations. A Control Plan requirement for all dischargers has been incorporated into the permit as a strategy for improving compliance with effluent limitations and a tool for the division to offer compliance assistance and compliance oversight. Permittees are required to document the control measures and implementation of the control measures that will be used to attain consistent compliance with permit conditions.

#### 1. Spills

A requirement to describe the specific measures and implementation of those measures for spill prevention and response has been incorporated into the permit as an element of the Control Plan. Hydrostatic testing is performed to verify the structural integrity of the equipment being tested by using pressure, which places stress on the equipment. Due to the nature of this activity, structures may fail during testing and spills may result. All appropriate measures should be taken to reduce the chance of a spill occurring, however, the Spill Prevention, Response, and Reporting section of the permittee's Control Plan should be utilized by permittees to implement appropriate response measures in the case of a spill. Spills shall be reported to the spill line in accordance with the division's Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits (WQE-10), located here: <https://www.colorado.gov/pacific/sites/default/files/WQE-10.pdf>.

Spills shall not be reported as a discharge because these are unplanned events - these are unauthorized releases and should be treated as spills. Once a spill has been reported, the information will be routed through the division as appropriate. It is not necessary for the permittee to make noncompliance notifications per Part II.A.3 of the permit for spills because

this noncompliance notification requirement applies to authorized discharges. The permittee is not required to note the spill on the DMR, but may choose to note it on the cover sheet submitted with the DMR, if a cover sheet is submitted.

## 2. Control Measures

During the stakeholder process, permittees requested that the division provide examples of control measures. The previous permit contained some examples of control measures, this list has been updated and expanded and included below. This list is not meant to be all inclusive; additional control measures must be implemented as necessary to maintain compliance with all permit conditions. Violation of an effluent limitation is a violation of the permit regardless of control measures implemented.

Control measures may include, but are not limited to:

- a. Providing appropriate treatment to meet effluent limits;
- b. Prevention of erosion and/or scouring at the discharge point (for example, by modifying the discharge structure to disperse flows);
- c. Removal of debris or contamination in pipelines, tanks, or vessels prior to hydrostatic testing. Removal of debris or contamination from temporary storage vessels, piping, etc. which will be used to store or transport the effluent prior to discharge. Collected debris and other contamination shall be disposed of in accordance with all local, state and federal regulations, and shall be managed to prevent the contamination of the effluent or waters of the state.
- d. Filtering of discharges that may contain oil or grease with oil absorbent booms, socks, pads, or a filter structure containing oil absorbing material before discharge. An oil/water separator may be needed to comply with the effluent limitations.
- e. Proper maintenance of structural control measures. Control measures must be maintained in a manner and frequency to ensure proper operation and consistent compliance with permit effluent limitations.
- f. Regular visual inspection of the discharge and maintaining records of inspection findings and corrective actions completed to address any inspection findings. Where site inspections note the need for control measure maintenance activities, maintenance, repairs, or replacement of control measures should be performed immediately and recorded in the control plan or discharge log.
- g. Use of control measures to prevent any sediment deposited during land application from being transported by the discharge or by stormwater runoff to surface waters or other conveyances.
- h. Use of field test kits and/or retention of the effluent until analytical results are received as necessary to confirm compliance with permit effluent limitations prior to discharge.
- i. Screening of source water or the effluent to identify elevated levels of pollutants which may require additional treatment.

## B. Application Supplement Requirements

The division may require the permit applicant to submit additional information with the application as necessary to allow the division to properly characterize the nature of the discharge, applicability of this general permit to the proposed discharge, and appropriate effluent limitations to be incorporated into the certification. An example of an instance where additional information may be required is when source water is being transported from another state or the division otherwise doesn't have enough



information to determine whether the source water could contribute significant quantities of pollutants of concern. Another example would be if the permittee is testing a material (other than that typically seen with this type of activity) which may contribute pollutants of concern necessitating inclusion of additional parameters in the certification to discharge. A final example is if something was previously stored in or transported through the equipment being tested or flushed which may contribute pollutants of concern which would necessitate inclusion of additional parameters in the certification to discharge.

#### C. Removed Substances

A requirement has been incorporated into the permit that solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in accordance with applicable regulations. As part of this requirement, the permittee must implement control measures as necessary to prevent sediment or other pollutants which may be deposited during land application from being transported by stormwater runoff to surface waters or other conveyances.

#### D. Compliance Schedules

Compliance schedules are authorized to be included in certifications as needed. All information and written reports required by a compliance schedule should be directed to the Permits Section for final review unless otherwise stated.

### VII. REFERENCES

- A. Basic Standards and Methodologies for Surface Water, Regulation No. 31, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective January 31, 2013*.
- B. Basic Standards for Groundwater, Regulation No. 41, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective January 31, 2013*.
- C. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective January 30, 2015*.
- D. Regulations for Effluent Limitations, Regulation No. 62, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective July 30, 2012*.
- E. Colorado River Salinity Standards, Regulation No. 39, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective August 30, 1997*.
- F. Dillon Reservoir Control Regulation, Regulation No. 71, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective May 30, 2007*.
- G. Cherry Creek Reservoir Control Regulation, Regulation No. 72, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective November 30, 2012*.
- H. Chatfield Reservoir Control Regulation, Regulation No. 73, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective March 30, 2009*.
- I. Bear Creek Watershed Control Regulation, Regulation No. 74, Colorado Department of Public Health and Environment, Water Quality Control Commission, *effective May 30, 2005*.
- J. Antidegradation Significance Determination for New or Increased Water Quality Impacts, Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, *effective December 2001*.
- K. Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential Procedural Guidance (Clean Water 1), Colorado Department of Public Health and Environment, Water Quality Control Division, *effective November 18, 2013*.



- L. Colorado Mixing Zone Implementation Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, *effective April 2002*.
- M. Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Domestic and Industrial Wastewater Treatment Facilities, Water Quality Control Division Policy WQP-20, *effective May 1, 2007*.

## VIII. Public Notice Comments

The draft general permit and associated fact sheet were noticed for public comment on April 17, 2015. The 30 day comment period was extended by 14 days based on stakeholder requests to extend the comment period. The comment period ended June 2, 2015. Comments and questions were received from Anadarko Petroleum Corporation, Aurora Water, City of Arvada, City of Fort Collins, City of Golden, Colorado Springs Utilities, Colorado Water Utility Council, DCP Midstream, Denver Water, and Public Service Company of Colorado. Summaries of the comments and questions received by the division and the division's responses are provided below, organized by topic. The full comments and supporting documents are contained in the permit file and are available upon request from the division's record center.

### General Comments

#### **Comment 1, Colorado Springs Utilities**

**Clarify Covered Activities:** In the permit documents, there are references to hydrostatic testing and flushing of 1) gas and petroleum pipelines, tanks, and vessels; 2) potable water pipelines, tanks and vessels; and 3) sanitary sewer pipelines. Each of these activities is unique and is performed differently to meet safety, health and operational needs. It is difficult for us to understand what activities are intended to be covered under the permit. Basic information should be provided with regard to the procedures that take place during hydrostatic testing, as well as flushing activities. Furthermore, the inclusion of sanitary sewer lines has not been previously mentioned by the Division in recent stakeholder meetings or supporting documents. If the Division indeed intends to include sanitary sewer lines in this permit, it would be beneficial to the stakeholders to engage in further discussions to determine how this permit might apply to such activities.

**Response 1 - Hydrostatic test water means water placed in pipelines, tanks, etc. (new/unused or used) and raised to greater than atmospheric pressure in order to check for leaks and/or the structural integrity of these facilities.** For the purposes of this permit, hydrostatic test water also includes tanks and pipelines filled with water to test for leaks without raising pressure to above atmospheric pressure. The division has included a definition of hydrostatic testing in the permit based on this comment. However, the division is not defining specific procedures for performing hydrostatic testing recognizing that procedures may vary. The focus of the general permit is to ensure the protection of public health and the environment by incorporating appropriate effluent limitations and monitoring requirements into the general permit, not by defining testing procedures. With this general permit, the division anticipated that hydrostatic test water would be wastewater that contains only residuals (i.e. low concentrations) of the materials of which the piping is constructed and/or residuals of the contents of the pipe after the bulk of pollutants have been otherwise removed.

In selecting the types of activities to be covered by this general permit, the division considered the types of activities that are currently covered and that have been covered in the past. During the current permit cycle, permit applications have been received for hydrostatic testing of various types of equipment, including but not limited to: oil and gas pipelines and tanks, potable water distribution systems, and sanitary sewer lines. Discharges of potable water from potable water distribution systems have been excluded from coverage under this general permit based on stakeholder comments received during the public notice period (see the response to comment 7 for additional information). The hydrostatic testing permit became effective in 2008 and was written by the division to carve out general permit coverage for hydrostatic testing discharges from oil and gas facilities from the Minimal Industrial Discharge General Permit, also referred to as the MinDi. However, the division received



permit applications for other types of activities during the 2008 permit cycle. The intent of the division upon renewal of this general permit is to offer general permit coverage for a broad range of hydrostatic testing activities as a service to stakeholders seeking general permit coverage for discharges resulting from hydrostatic testing activities, as long as the activities meet the requirements of Regulation 61.9(2)(a)(ii), meaning that discharges must belong to a category of point sources other than stormwater point sources that all:

- (A) involve the same or substantially similar types of operations;
- (B) discharge the same types of wastes;
- (C) require the same effluent limitations or operating conditions;
- (D) require the same or similar monitoring; and
- (E) in the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

By incorporating the ability to include *E. coli* or fecal coliform numeric effluent limitations, the division has continued its ability to cover discharges from sanitary sewer lines. The division decided to continue to provide this general permit as a coverage option for this type of discharge because that decision complies with the requirements of 61.9(2)(a)(ii) and there is currently no alternative general permit option or low risk discharge guidance for this type of discharge. This does not represent a change in the activities covered during the 2008 permit cycle. Additionally, because this is the only general permit that provides coverage for hydrostatic testing discharges from sanitary sewer lines, anyone discharging hydrostatic test water to the environment from this type of activity presumably would have already been operating under this permit.

#### **Comment 2, Colorado Springs Utilities**

Define outfall, discharge point, and monitoring point. These terms are all used in the permit but it is not clear if they all mean the same location.

**Response 2** - The external outfall is the point where the discharge leaves a facility and the operational control of the permittee. The permit authorizes a discharge from this location and typically the effluent limits and monitoring requirements apply at this same location. However effluent limits and monitoring requirements can be applied at other locations, such as at an internal outfall. The division allows effluent limits to be applied and samples collected at internal outfalls when requested by the permittee for operational flexibility, as long as the location is determined to be representative of the discharge. The division also at times requires effluent limits to be applied and samples to be collected at internal outfalls, for example in cases where multiple waste streams are commingled prior to discharge. The division has often used the terms outfall, discharge point, and monitoring point interchangeably in the past. The division has applied the broader term of "permitted feature" in this renewal to allow the effluent limits and monitoring requirements to be applied to various types of permitted features. Additional changes were made to the permit in regards to this terminology.

#### **Comment 3, Anadarko Petroleum Corporation & DCP Midstream**

We believe CDPHE should consider the addition of a provision in the general permit to address discharge of de minimis amounts of hydrostatic test water with separate reporting requirements. We believe such a provision would be beneficial for both CDPHE and regulated entities. Other states have considered the matter and have included such provisions. For example, in New Mexico where tests are conducted on new pipelines where the volume of water is less than 25,000 gallons, an annual report must be compiled and submitted rather than reporting on a monthly basis. See GUIDELINES FOR HYDROSTATIC TEST DEWATERING Revised January 11, 2007 from the New Mexico Oil Conservation Division for further information.

**Response 3** - The division reviewed the referenced New Mexico permit and found the allowance to be limited to discharges to groundwater resulting from land application. Per the Annual Temporary Permission to Discharge section of the Guidelines for Hydrostatic Test Dewatering, New Mexico Oil Conservation Division, revised January 11, 2007, a hydrostatic test of new pipelines generating less than 25,000 gallons per event may be granted an annual temporary permission to discharge when the conditions of that section are met. Condition d requires that, "the discharge does not enter any lake,

perennial stream, river or their respective tributaries that may be seasonal.” Condition e requires that “no discharge shall occur: 1. where ground water is less than 10 feet below ground surface; ii. within 200 feet of a watercourse, lakebed, sinkhole or playa lake; iii. within an existing wellhead protection area; iv. within, or within 500 feet of a wetland; or v. within 500 feet from the nearest permanent residence, school, hospital, institution or church.” In Colorado, discharges to ground water, as may occur with land application, must be permitted just as discharges to surface waters must be permitted. Specifically, per Regulation 61, the Colorado Discharge Permit System Regulations, 61.14 Groundwater (1) Applicability (a) a permit shall be required for all land application discharges and for all discharges from impoundments.

#### **Comment 4, DCP Midstream**

Under the old permit you allowed the development of a BMP Management plan in lieu of numeric limitations if the discharge met certain criteria. I was not involved when we first applied for coverage under the permit and so I don't have any real history as to what the Plan could have done for us, but reading about it now I wonder if for small discharges (say less than 25,000 gallons) if we met certain criteria (discharge to ground, had a dewatering structure, prevented erosion, etc) we could have done the discharge without sampling. If so, could this same philosophy work under the Control Plan? For instance, in New Mexico, they have a statewide permit for discharges that are under a certain threshold (25,000 gal). In order to take advantage of the statewide permit you need to submit an annual report. If you can't meet the criteria you apply for an individual permit. By going with a threshold system I think CDPHE would get the info they needed without increasing the workload/Just to give you some numbers during good times we could do 35-40 well connects/month. Most of these would be for shorter, small pipes with discharges that are less than 15,000 gallons. For our longer pipelines, we may do 3-4 bores under roads and waterbodies in a 10 mile section. Each bore would be 10-15,000 gallons.

**Response 4** - Per Regulation 61, the Colorado Discharge Permit System Regulations, 61.8(4) Conditions of Permits, (r) The permit shall include best management practices to control or abate the discharge of pollutants when numeric effluent limitations are infeasible, when the practices are reasonably necessary to achieve effluent limitations and standards, or when authorized under 304(e) of the federal act for control of toxic pollutants and hazardous substances.” A Control Plan requirement requiring permittees to document control measures (BMPs) and spill prevention, response, and reporting has been incorporated into the renewed permit because the division has determined that control measures are reasonably necessary to achieve effluent limitations. Numeric effluent limitations are also applied in the renewed permit because Regulation 61 requires that numeric effluent limitations be incorporated into permits except where such limitations would be infeasible. The division has determined that numeric effluent limitations are feasible for the types of discharges covered by this general permit. See the response to comment 3 related to New Mexico's annual temporary permission.

#### **Comment 5, City of Arvada**

The Hydrostatic Testing Draft General Permit as written is not feasible to use for any potable water system. Arvada and other municipalities and Districts are interested in the protection of permit coverage. Please add us to the list of stakeholders who would like to be involved with the division to develop a general permit for potable water operations.

**Response 5** - Based on stakeholder input the division has removed the ability for this general permit to cover potable water systems. Potential details related to development of an alternative general permit and/or any associated stakeholder process is outside of the scope of this permit and fact sheet, but the division has noted that the utilities that submitted comments during the public notice period would prefer development of an alternative general permit.

#### **Permit Part I.A**

#### **Comment 6, DCP Midstream, Permit Part I.A & Fact Sheet Section III.C.3**

Add a definition of "flushing" to the definitions section. Does it include running water through the pipe (no chemicals added) to clear debris from the pipe prior to the hydrotest? Or is this just related to the fire water systems?

**Response 6** - Discharges from flushing activities are not authorized by the permit. Based on stakeholder comments received during the public notice period, the division determined that it may be difficult to differentiate "flushing" discharges from "cleaning" discharges which are prohibited per Part 1.A.2.e.iii. Discharges from cleaning activities are excluded from coverage under this general permit because they could result in the discharge of concentrated pollutants. The intent of the division is to cover discharges of wastewater that contain only residuals (i.e. low concentrations) of the materials of which the piping is constructed and/or residuals of the contents of the pipe after the bulk of pollutants have been otherwise removed. The permit does not cover discharges of highly concentrated industrial wastes, which should be isolated and properly disposed, and not discharged to waters of the state.

**Comment 7, Colorado Water Utility Council, City of Golden Public Works Department, Aurora Water, Colorado Springs Utilities, City of Fort Collins, Denver Water, & City of Arvada, Permit Part I.A & Part I.B, Fact Sheet Section III**

The CWUC is opposed to including the discharges of potable water from potable water distributions systems in the Hydrostatic Testing permit. Historically, discharges of potable water from drinking water systems were covered under a general permit for treated water discharges, COG380000. The division chose not to renew this permit when it expired in 2006 and instead chose to include potable water discharges in the Low Risk Discharge Policy (WQP27). In 2009, the division developed the Low Risk Discharge Guidance for Discharges of Potable Water (the guidance) to replace the general permit. The CWUC and its member utilities opposed this decision by the division as well as the Low Risk Discharge Policy (WQP27). The CWUC felt this change exposed drinking water utilities to the risk of third party lawsuits for discharging without a permit. We were also concerned that over time, the coverage offered under the treated water discharge permit for a variety of potable water discharges common to potable water distribution systems would end up in several general permits. Under this scenario, utilities need to comply with several permits instead of just one and the inclusion of potable water systems in the hydrostatic testing discharge permit seems to confirm these fears. Despite the statement by the division that utilities may continue to rely on the low risk discharge guidance for discharges related to hydrostatic testing and flushing of potable water systems, the existence of a permit that covers these very discharges implies the need for a permit and the compliance risk of discharging without one. If the division believes that permit coverage for these discharges are appropriate, they should write a permit specific to the drinking water industry that accounts for the variety of treated water discharges that are currently identified in the guidance and WQP27.

**Response 7** - Based on stakeholder opposition to inclusion of coverage for discharges of potable water from potable water distribution systems in this permit, the permit scope will not include discharges of potable from potable water distribution systems. In developing the draft permit it was the division's intent to allow contractors who had obtained permit coverage for testing and disinfection of new potable water lines during the previous permit cycle to continue to be provided permit coverage under the renewed permit. At the time the draft was developed these permittees were unable to meet the conditions of the low risk discharge guidance for discharges of potable water and there was no alternative permit coverage available for these types of discharges. However, the division received comments during the draft permit public notice period from the Colorado Water Utility Council and representatives from 6 water utilities opposing inclusion of this activity in the renewed permit. Among the major concerns expressed during the public notice period included the following: 1) the existence of a permit that covers activities similar to those for which water utilities discharge under the low risk discharge guidance for discharges of potable water was perceived to imply the need for a permit and a compliance risk of discharging without one, and 2) utilities expressed concern that potable water distribution system discharges would be subject to multiple general permits over time. The division has reaffirmed that these discharges are more appropriately covered in accordance with WQP-27, Low Risk Discharges Policy, as an alternative to general permit coverage. The division determined that clarifications should be made to the low risk discharge guidance for discharges of potable water regarding the issues raised during the general permit renewal process. The division



has made those clarifications and has aligned the timeline of the update to the low risk guidance for discharges of potable water with the timeline for issuance of the final permit.

**Comment 8, Aurora Water, Permit Part I.A.1, Fact Sheet Section III.C.2**

Aurora Water would recommend deleting item 3. Flushing activities from Section C. Activities covered. Most flushing is done utilizing potable water and should either be addressed through WQP27 or through reissuance of the treated water distribution system general permit.

**Response 8** - Discharges from flushing activities are not authorized by the permit. See the response to comment 6.

**Comment 9, Colorado Springs Utilities, Permit Part I.A.1, Fact Sheet Section III.C**

Define or reference a definition of Intermittent Discharges and Continuous Short-Term Discharges.

**Response 9** - The definitions of "short-term" and "intermittent" are included in the definitions section of the permit. This permit may cover discharges which meet the definition of intermittent (i.e. not continuous), or may cover discharges which are continuous, as long as they are short-term, meaning that they do not exceed 2 years in length. A clarifying sentence has been added to Section III.C of the Fact Sheet.

**Comment 10, Colorado Springs Utilities, Permit Part I.A.1 paragraph 3, Section V.B**

Define/expand on the different types of source waters that are typically used for the activities covered under this permit.

**Response 10** - During the current permit cycle the following types of source water have been indicated on permit applications for use in the hydrostatic testing process: potable water, groundwater, and surface water. The division will evaluate which pollutants may be added to the certification based on the potential for pollutants to be present in the source water. For instance, chlorine will be added to the certification when potable water is being used in the testing process.

**Comment 11, Colorado Springs Utilities, Permit Part I.A.1, Fact Sheet Section III**

Define/expand on the various types of PWDS discharge activities that division would include in this permit, unless managed under the LRDG. These would include for example, routine O&M, repairs, replacement, new installations, cleaning, inspections, preventative maintenance of the PWDS transmission/distribution system, to include the potable water reservoirs/storage tanks, and treatment plants. Discharges may include flushing from a hydrant, main, valve, blow-off, taps/flange, storage tank/reservoirs, sampling hydrants, and line disinfection and dechlorination (residual and super chlorinated). a. Define/outline the types of discharge/non-discharge options that may be available for PWDS activities (and other activities that may be applicable). E.g. 1. Discharge to surface water requires chemical dechlorination of both line residual and super chlorinated potable water. 2. Discharges contained on site in which chlorine is dissipated naturally, or 3. PWDS discharges in which the super chlorinated (line disinfection) water is captured and hauled to WWRF for treatment, and the remaining pipe volume (residual chlorine portion of the flush) is discharged to surface waters

**Response 11** - The renewed permit will not provide coverage for any discharges of potable water from potable water distribution systems. The low risk discharge guidance for discharges of potable water will remain a discharge option for utilities to utilize. Discharges to the environment must meet all of the conditions as outlined in the low risk discharge guidance. Discharges to POTWs should only be performed with prior approval of the POTW and in compliance with any industrial pretreatment requirements.

#### **Comment 12, Colorado Springs Utilities, Permit Part I.A.2**

Does the Division consider emergency discharges (e.g. from water line breaks) to be excluded from coverage under this permit? These types of discharges have historically been exempt in previous permits.

**Response 12** - Discharges of potable water from potable water distribution systems have been excluded from coverage under this permit. Generally, emergency discharges such as spills resulting from line breaks are considered unpermitted discharges and would not be authorized by a permit.

#### **Comment 13, Aurora Water, Permit Part I.A.2**

Aurora Water suggests that both Potable Water Distribution System Discharges and Flushing Activities be included in Section D. Limitation on Coverage. This section identifies those discharges specifically excluded from coverage under the Hydrostatic Testing General Permit. Aurora Water believes it is more appropriate to exclude these activities in order to eliminate confusion between WQP27 and the need to obtain the Hydrostatic Testing General Permit.

**Response 13** - This exclusion has been added.

#### **Comment 14, Denver Water, Permit Part I.A.2**

Denver Water's concern is the division's coverage of potable water in the same permit that covers oil and gas operators, but excludes reclaimed water. Under the draft permit, "hydrostatic testing and flushing activities utilizing reclaimed water" will no longer be eligible for permit coverage (Fact Sheet at p. 5). In deciding to no longer offer coverage for hydrostatic discharges using reclaimed water, the division reasons that reclaimed water is treated domestic wastewater, which may contain pollutants of concern other than those typically associated with hydrostatic testing and flushing of pipes, tanks, and similar vessels (Fact Sheet at p. 5). Yet, the Hydrostatic General Permit is intended to cover discharges from the oil and gas sector, which may be dealing with water of a lesser quality than reclaimed water. The Fact Sheet also does not explain why potable water, a higher quality water, is allowed to operate under the same general permit as hydrostatic discharges from the oil and gas sector. Nor does the Fact Sheet explain why reclaimed water is no longer covered by the Hydrostatic General Permit, but potable water discharges remain covered. For these additional reasons, potable water should not be included under the same general permit intended to cover hydrostatic discharges from oil and gas pipelines. Alternatively, hydrostatic discharges using reclaimed water should be included.

**Response 14** - Activities covered under a general permit must meet the requirements of Regulation 61.9(2)(a)(ii), meaning that the activities fit into a category of point sources other than stormwater point sources as long as they:

- (A) involve the same or substantially similar types of operations;
- (B) discharge the same types of wastes;
- (C) require the same effluent limitations or operating conditions;
- (D) require the same or similar monitoring; and
- (E) in the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

Hydrostatic testing of oil and gas equipment may be performed using potable water, therefore, although discharges of potable water from potable water distribution systems will not be covered by the renewed general permit, discharges utilizing potable water may still occur under the general permit. This type of discharge meets the above requirements (the parameter of concern related to potable water is total residual chlorine which is limited by the general permit). Oil and gas wastes are well characterized and parameters such as benzene, toluene, ethylbenzene, and xylenes (BTEX) have been incorporated into the general permit in order to address wastes typically associated with the oil and gas industry. Reclaimed water, being partially treated domestic wastewater, may contain additional parameters including metals and nutrients. Additionally, the pollutants present and the pollutant levels in reclaimed water may vary from one treater to another which makes conducting a reasonable potential determination more resource intensive and therefore outside of the scope of

this general permit. Additionally, the pollutants associated with the activities covered under this permit such as chlorine and BTEX have accepted field treatment technologies capable of meeting effluent limits. Pollutants associated with reclaimed water, including nutrients and certain metals, may be much more difficult if not impossible to treat in the field to achieve the end-of-pipe permit limits that are applied in a general permit. Therefore, reclaimed water does not meet the above cited requirements because the wastes are different from other activities covered and different effluent limitations are anticipated to be necessary.

**Comment 15, Colorado Springs Utilities, Permit Part I.A.2.e.ii, Fact Sheet Section III.D.3.b**

Add some brief verbiage to quickly indicate this pertains to waste impoundments under the Solid Waste Regulation.

**Response 15** - Discharges solely to groundwater may be subject to various implementing agencies depending on the activity, including but not limited to the Hazardous Materials and Waste Management Division and the Colorado Oil and Gas Conservation Commission. Therefore, this standard permit language has been kept.

**Comment 16, Colorado Springs Utilities, Permit Part I.A.2.e.iii**

Please clarify what the Division identifies as “cleaning activities”. Does the exclusion of discharges from cleaning activities include those in which no cleaning agent was applied, such as power washing/spraying?

**Response 16** - This exclusion does apply to all cleaning activities, including power washing. See response 6 for further information regarding the cleaning exclusion. Per Section VI.A.2.c of the fact sheet, one suggested control measure for all permittees includes performance of removal of debris or contamination in pipelines, tanks, or vessels prior to hydrostatic testing. Collected debris and other contamination shall be disposed of in accordance with all local, state and federal regulations, and shall be managed to prevent the contamination of the effluent or waters of the state.

**Comment 17, DCP Midstream, Permit Part I.A.3 & Part II.B.11**

Under Part I.A.3 Application Requirements the paragraph that starts, "A permittee desiring continued coverage..." is not real clear. It states that for continued coverage under the general permit the permittee must reapply at least 180 days in advance. I assume this would be for blanket coverage certifications. If it is for a specific pipeline project not under a blanket cert. I would not think it relevant when they can get a new cert. after just 30 days. Based on what is written in the bullets this sounds like it should be about the general permit and what happens when it expires not about certifications. Same type issue with Part II.B.11 permit application

**Response 17** - These sections of the permit do refer to the expiration of the general permit. Per Regulation 61.4(1)(d), "A permittee with a currently effective permit shall submit a new permit application consistent with this section and with section 61.10, at least 180 days before the existing permit expires, unless permission for a later date is granted by the Division. Applications submitted later than the expiration date of the existing permit will be treated in all respects as applications for new permits." This requirement applies to all permittees with permit coverage under the Hydrostatic Testing general permit. Permittees who do not intend to reapply for ongoing permit coverage in advance of expiration of the general permit should terminate their permit coverage in advance of expiration of the general permit. If they do not and their coverage expires they have an ongoing liability for discharging without permit coverage in that they did not apply for termination and certify that the discharge has ceased.

## **Permit Part I.B**

### **Comment 18, DCP Midstream, Permit Part I.B, Fact Sheet Section III.D.3**

Add a definition of “reclaimed water” to the definitions section.

**Response 18** - The following definition of reclaimed water has been added to the permit and fact sheet: 'Reclaimed Water' is domestic wastewater that has received secondary treatment by a domestic wastewater treatment works and such additional treatment as to enable the wastewater to meet the standards for approved uses in accordance with Reclaimed Water Control Regulation 84.

### **Comment 19, DCP Midstream, Permit Part I.B, Fact Sheet Section IV.B**

Add a definition of “blanket coverage” to the definitions section.

**Response 19** - The following definition of "blanket coverage" has been added to the permit and fact sheet: 'Blanket coverage' means authorization of activities involving multiple pipes, tanks, or similar vessels within a specified geographic area provided that common permit terms and conditions are appropriate and provided that the division grants such authorization in the permit certification.

### **Comment 20, Colorado Springs Utilities and Anadarko Petroleum Corporation, Permit Part I.B.1**

Define/ clarify what “physical boundaries” would include or look like. Would this be a Utility service area? Or a watershed basin, or stream segment?

**Response 20** - Physical boundaries could include a watershed basin, a stream segment, a county, the state of Colorado, etc. A permit applicant may be granted blanket coverage for the physical boundary requested in the permit application as long as the division determines that common permit terms and conditions are appropriate.

### **Comment 21, Colorado Springs Utilities, Permit Part I.B.1**

Should read “...under this permit when hydrostatic testing *and/or flushing* of multiple...”

**Response 21** - Discharges from flushing activities will not be authorized by the permit, therefore no changes to the wording of this section are necessary.

### **Comment 22, City of Arvada, Permit Part I.B.1 & I.E.2, Fact Sheet Section IV**

The Hydrostatic Testing Draft General Permit requires the number and location of outfalls be identified to determine the number of Discharge Monitoring Reports that will be needed for reporting. There is little flexibility in changing these outfalls, which seems to be necessary for the hydrostatic testing industry. The comment from the Division was to "Aim High." We recommend finding a way to add flexibility in outfall number and location.

**Response 22** - It is correct that it is necessary for permit applicants to indicate the number of anticipated permitted features with a permit application in order to determine the appropriate number of discharge monitoring reports (DMRs). Additional permitted features may be added to a permit certification through a modification request. With the blanket coverage option, the exact location of the permitted features is not required to be provided with the permit application, instead indication of a geographic region is required. Additionally, the physical location of the permitted features may be changed from month to month within the approved geographic region. The division worked with stakeholders prior to drafting the renewed permit to incorporate as much flexibility as possible through the blanket coverage option. However, there are constraints to the level of flexibility that can be incorporated into the permit based on the need to apply appropriate effluent limits and track discharge location and effluent data in the EPA integrated compliance information system database. The division believes that it has struck the best balance achievable at this time between data requirements and permit flexibility in this permit.

**Comment 23, Colorado Springs Utilities, Permit Part I.B.2**

Include and define the acronym AWQC and/or reference the source.

**Response 23** - The applicable water quality criterion (AWQC) is spelled out in the header of the permits effluent limits tables and is included in the definition section of the permit. The term is taken from the division's Clean Water Implementation Policy 6, Practical Quantitation Limits (PQLs).

**Comment 24, City of Golden Public Works Department, Permit Part I.B.2**

The permit includes discharge limits of 0.011 mg/l (30 day average) and 0.019 mg/l (daily maximum) for total residual chlorine on an analysis that needs to be done in the field. Where utilities have to prove potable water has a detectable chlorine residual to comply with Colorado Primary Drinking Water Regulations, a minimum field measurement of 0.2 mg/l is required (Regulation 11, Section 11.8(3)(b)). The division's drinking water section maintains that a measurement of less than 0.2 mg/l is too unreliable, even on laboratory grade benchtop instruments, to demonstrate chlorine is present in the water. Now, the Permits Section is requiring a measurement of less than 0.019 mg/l to prove the same thing for a measurement taken in the field on field instruments that use methods susceptible to interference. We believe this is inappropriate and that it would not be possible for us to comply.

**Response 24** - The chlorine limits are based on the aquatic life standards taken from Regulation 31. Per permit tables B.2.a and B.2.c, the practical quantitation limit for total residual chlorine is 0.5 mg/l, which is achievable using EPA approved field methods. Per Part I.E.4 of the permit, when a permittee selects an analytical method that complies with the requirements of that section but the method has a minimal level greater than the permit limit, it will not be considered a violation of the permit limit as long as the method is sufficiently sensitive.

**Comment 25, Colorado Springs Utilities, Part I.B.2, Tables**

There is a concern that the pollutants lists may not accurately reflect the industry specific pollutants of concern based on individual industry pipe materials and discharge activities.

**Response 25** - The division has incorporated authority to implement site specific limitations based on the nature of the activity. The division has determined that flow, oil and grease, pH, and total dissolved solids (for discharges to groundwater) or total suspended solids (for discharges to surface water) are appropriate for all dischargers based on the general nature of hydrostatic testing activities. Additional activity specific parameters will be incorporated into a facility's certification as the division determines appropriate based on the review of the permit application submitted for the activity based on materials tested as well as any other relevant considerations.

**Comment 26, Colorado Springs Utilities, Permit Part I.B.2, Tables**

Would the division consider a Turbidity field test method as an alternative for Total Suspended Solids (TSS)?

**Response 26** - Correlation between turbidity and total suspended solids is highly site specific. As the nature of the activities authorized by this general permit will be intermittent and/or short-term and considering the need to maintain a streamlined process for certification issuance, establishing a correlation between turbidity and total suspended solids for incorporation into a permit certification is beyond the scope of this general permit.

**Comment 27, Public Service Company of Colorado, Permit Part I.B.2, Table footnote 4**

PSCo's source water is typically potable. TDS levels in potable water can vary widely and in some cases may account for nearly half of the limit presented in the tables. PSCo is concerned that this may lead to permit exceedances in cases of elevated native TDS levels in potable source water.

**Response 27** - The total dissolved solids limit incorporated in the permit is based on Regulation 41, the Basic Standards for Groundwater. This limit has been established by the Water Quality Control Commission for the protection of groundwaters of the state. The division recognizes that source water used by some permittees may contain total dissolved solids; however, intake credits are outside of the scope of this general permit.

**Comment 28, Public Service Company of Colorado, Permit Part I.B.2, Table footnote 4**

Per Regulation 41, Table 4 - "TDS Water Quality Standards" and further explained in Section 41.12 Statement of Basis and Purpose the groundwater standards allows for the application of TDS limits on a sliding scale based on background TDS levels. The Division should apply TDS limits in this manner for all discharges, including the statewide blanket coverage permits. At a minimum, PSCo proposes the TDS limit presented in the draft permit be increased to 500 mg/L based on the following statement in Section 41.12: "Total dissolved solids concentrations of less than 500 mg/l are not expected to impair any ground water use".

**Response 28** - The division determined not to use a sliding scale for total dissolved solids because the process required for establishing background levels of TDS (installation of groundwater monitoring wells, establishment of groundwater flow, collection and analysis of multiple groundwater samples, etc.) is outside of the scope of this general permit. For consideration of background levels of TDS, alternative permit coverage may be sought. Table 4 in Regulation 41 indicates that for groundwater with a background TDS Value (mg/l) of 0-500, the maximum allowable TDS concentration is 400 mg/l or 1.25 times the background level, whichever is least restrictive. As an example, if the background TDS concentration were 100 mg/l, the maximum allowable TDS concentration would be 125 mg/l. Therefore, without knowing the background TDS value, the division has already implemented the least restrictive allowable TDS limit, which is 400 mg/l. The division acknowledges the section of the statement of basis and purpose quoted in the comment, however, the division must implement the regulation the way it is written, in this case in Table 4.

**Comment 29, Colorado Springs Utilities, Permit Part I.B.2, Table footnote 5**

Mentions "sanitary sewer lines" - Remove this reference, unless the Division intends to include the wastewater collection and treatment systems in this permit. Will *E. coli* and Total coliform monitoring be required for gas and petroleum or PWDS discharges, or both? Would *E. coli* only be required only for sanitary sewer lines or could it be applied to other discharges?

**Response 29** - During the current permit cycle the division received permit applications for new installation, repair, and replacement of sanitary sewer lines. The division intends to continue to provide permit coverage for these activities under the general permit since the discharge fits well into the scope of the general permit and no alternative discharge coverage exists. Monitoring for *E. coli* or total coliform will only be required when the division finds that there is a qualitative reasonable potential for these pollutants to be in the discharge. The division has not made a qualitative reasonable potential determination for *E. coli* for activities other than those related to sanitary sewer systems under this general permit in the past.

**Comment 30, Public Service Company of Colorado, Permit Part I.B.2, table footnote 9, Fact Sheet Section V.B.3**

Please explain how dissolved iron will be applied to the blanket coverage option. If the most restrictive limit is applied, the flexibility of the blanket coverage will be limited.

**Response 30** - For permittees authorized to discharge under blanket coverage, where the division has made a qualitative reasonable potential determination that iron may be present in the discharge, a standard of 300 ug/l will conservatively be applied in the certification. Since the surface water receiving stream is not required to be identified in a permit application for blanket coverage, it is unknown at the time the certification is issued whether the receiving stream has a water supply classification and/or what the existing quality was as of January 1, 2000, therefore the standard of 300 ug/l is applied. The standard of 300 ug/l is applied for all discharges to groundwater authorized

under blanket coverage because all groundwater within the state is a potential drinking water source. The blanket coverage option allows an entity operational flexibility in establishing permitted features from month to month, however, the trade off for that flexibility is that the most stringent effluent limitation based on the receiving stream (surface water or groundwater) and the activity (testing of new or used equipment) will be incorporated into the certification to ensure protection of public health and the environment.

**Comment 31, Public Service Company of Colorado, Permit Part I.B.2, table footnote 11**

We understand that the Division has modified the effluent limits for benzene and BTEX pursuant to an EPA model permit, which showed that air stripping is an efficient and cost effective wastewater treatment technology. PSCo notes that this study is from 1989, and the results may not be true today. PSCo has surveyed its primary treatment contractors and they informed us that granulated activated carbon filtration is the preferred treatment method used to remove BTEX compounds due to its reliability, effective removal of organics, and its closed system configuration. Air stripping is not a common treatment method alternative offered by our contractors and can produce air emissions that may also require treatment and/or a permit. PSCo believes that future discharges from its projects will meet the new benzene and BTEX limits, but suggests that the Division reconsider the use of air stripping treatment for BPJ and as the basis for establishing the BTEX limits.

**Response 31** - The division acknowledges the age of the EPA model permit. The division chose to reference the model permit because it is the most up-to-date published EPA resource related to BTEX and technology based limits available. The division acknowledges that many permittees choose to use granulated activated carbon for treatment of BTEX. The division is not defining the treatment used by permittees but is applying the benzene and BTEX limits from the EPA model permit in this general permit. Given that technology has evolved since the model permit was issued, the division anticipates that permittees will be able to meet the technology based limits based on air stripping, but acknowledges that permittees might have the ability to meet even more stringent limits given the common use of GAC.

**Comment 32, DCP Midstream, Permit Table B.2.e**

Still not clear how the quarterly sampling in the CO river basin takes place. If we get a cert for a specific project and we sample 2 times during the discharge does that count for the quarterly sampling? Will there be a separate DMR or report?

**Response 32** - For discharges within the Colorado River Basin, quarterly average total dissolved solids (TDS) will be reported on a separate DMR from other parameters included in the certification. If the permittee has one discharge in the Colorado River Basin during the reporting period (calendar quarter), the permittee would report the analytical result as the quarterly average TDS value, or if multiple samples are analyzed, the permittee would report the average of the analytical results. If the permit applicant anticipates having discharges in the Colorado River Basin from more than 1 distinct physical location during a calendar quarter, the permit applicant should request multiple outfalls for that limit set (CR). Clarifying language has been added to Part I.E.1 of the permit.

**Permit Part I.C**

**Comment 33, City of Arvada, Part I.C.1**

We suggest providing a template for the Control Plan to ensure that the permittee's plan contains adequate detail to satisfy the division's expectations.

**Response 33** - The division agrees that a template would be a useful tool. This request will be considered as part of the compliance process following permit issuance considering resource limitations.

**Comment 34, Colorado Springs Utilities, Permit Part I.C.1.b.ii**

Possibly include “no TRC will be present in the effluent at the outfall. TRC will be dechlorinated by chemical or physical methods.”

**Response 34** - Total residual chlorine limits have been incorporated into the general permit for the protection of aquatic life. Based on the level of monitoring required by this general permit, the division has determined that incorporation of these limits is sufficient for environmental protection and is therefore not requiring an absence of total residual chlorine in the discharge.

**Comment 35, Colorado Springs Utilities, Permit Part I.C.1.b.ii**

Would the Division accept a GPS position instead of a latitude and longitude? Please define what formats are acceptable?

**Response 35** - A latitude and longitude is another way of referring to a GPS position - these are the same thing. The latitude and longitude must be provided in decimal degrees to 6 decimal places. Two widely accepted ways for a permittee to identify the latitude and longitude include using a GPS collector and using Google Earth.

**Comment 36, Colorado Springs Utilities, Part I.C.4.b**

Including monitoring data in a written report 5 days after becoming aware of an exceedance may be difficult to accomplish depending on a lab’s analytical turnaround time.

**Response 36** - The report is due within 5 days of becoming aware of a violation. The date the analytical result is received by the permittee is the date that the permittee is considered to have become aware of the permit violation in regards to permit conditions where awareness is dependent on laboratory results.

**Comment 37, Colorado Springs Utilities, Permit Part I.C.9**

TMDLs - Please reference where a permittee could find the TMDLs for a specific state water or stream segment.

**Response 37** - Total Maximum Daily Load (TMDL) documents are listed by river basin on the division's website here: <https://www.colorado.gov/pacific/cdphe/total-maximum-daily-loads-tmdl>.

**Permit Part I.D**

**Comment 38, Colorado Springs Utilities, Permit Part I.D, Fact Sheet Section III.C.3**

Lacks basic info about hydrostatic testing and flushing activities. A definition specifically for hydrostatic testing and flushing for potable water systems would be helpful. These activities may be performed differently, and use different types of materials for oil and gas versus potable water systems. Define/expand on the activities of hydrostatic testing of potable water distribution systems (PWDS). Describe how hydrostatic testing discharges differ from flushing activity discharges.

**Response 38** - Hydrostatic testing and flushing activities involving potable water and potable water distribution systems will not be covered by this permit. See the response to comment 1 for clarification of how hydrostatic testing is defined for the purpose of this general permit. Discharges from flushing activities are not authorized under the permit.

**Comment 39, Colorado Springs Utilities, Permit Part I.D**

Define hydrostatic testing versus leak testing (normal operating pressure).

**Response 39** - A definition of hydrostatic testing has been added to the definitions section of the permit. The division will consider permit applications for discharges associated with leak testing (i.e. testing performed at normal operating pressure) for those activities authorized under this general permit as the discharge would be expected to be substantially similar to a hydrostatic testing discharge (i.e. testing performed at greater than atmospheric pressure) and could therefore still appropriately be managed under this general permit.

**Comment 40, DCP Midstream, Part I.D**

Under Definitions may want to add groundwater in ( ) after subsurface water.

**Response 40** - The definition of "State Waters" has been updated to further define "subsurface waters" as "subsurface waters (groundwater)," for clarity.

**Comment 41, Colorado Springs Utilities, Permit Part I.D**

Is "Short-term discharge" the same as Continuous Short-term discharge, as used in Part I.A1?

**Response 41** - A "short-term" discharge may be intermittent or continuous. Please see clarification in response 9.

**Comment 42, Colorado Springs Utilities, Permit Part I.D**

Define TDS.

**Response 42** - Per Regulation 31.5(35), total dissolved solids, or TDS, refers to salinity. Per Regulation 31.12 excessive salinity and suspended solids levels can be detrimental to water use classifications.

**Comment 43, Colorado Springs Utilities, Permit Part I.D**

Define sludge as it is referenced in Section I.C.11 Removed Substances "...Solids, sludges, or other pollutants removed..."

**Response 43** - Per the CDPHE Final Guidance: Section 9 Waste Impoundments/November 2014, a "sludge" means any solid or semi-solid waste generated by a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility. The division has adopted this definition for inclusion in this permit and this definition has been added to the permit.

**Permit Part I.E**

**Comment 44, Colorado Springs Utilities, Permit Part I.E.1, Fact Sheet Section V.D**

Utilities suggests that the DMR reporting be on a Quarterly basis at the most rather than monthly. For some entities with blanket coverage, or that perform numerous flushing activities per day, this amount of reporting could be burdensome.

**Response 44** - Discharges of potable water from potable water distribution systems will not be covered by this general permit. The division has determined that monthly reporting is appropriate based on the intermittent and short-term nature of the activities authorized by this general permit.

**Comment 45, DCP Midstream and Anadarko Petroleum Corporation, Permit Part I.E.1**

Don't know how the eDMR works. Is there an electronic signature? May want to make that clear under Part I.E.1. As of right now the eDMR does not work for the statewide permit.

**Response 45** - NetDMR will be available for permittees with blanket coverage under the renewed permit. Inquiries regarding NetDMR may be directed to 303-691-4046 or to [CDPHE.WQNetDMRHelp@state.co.us](mailto:CDPHE.WQNetDMRHelp@state.co.us). Additionally, the Discharge Monitoring Report Guidance document may be accessed on the division's website at [www.coloradowaterpermits.com](http://www.coloradowaterpermits.com).

**Comment 46, Colorado Springs Utilities, Permit Part I.E.7**

Are flow measuring devices, in accordance with Part I.C.1.b, only required for Blanket coverage permittees?

**Response 46** - As indicated in Part I.B.2 of the permit, estimates for flow rate (MGD) are acceptable for all permittees [total flow (MG) and duration of discharge days are calculated values]. Part I.E.7 describes flow measuring methods. Permittees with blanket coverage are required to document the flow measuring method used in the control plan or discharge log.

**Permit Part II.B**

**Comment 47, DCP Midstream, Permit Part II.B.11**

Under Part I.A.3 Application Requirements the paragraph that starts, "A permittee desiring continued coverage..." is not real clear. It states that for continued coverage under the general permit the permittee must reapply at least 180 days in advance. I assume this would be for blanket coverage certifications. If it is for a specific pipeline project not under a blanket cert. I would not think it relevant when they can get a new cert. after just 30 days. Based on what is written in the bullets this sounds like it should be about the general permit and what happens when it expires not about certifications. Same type issue with Part II.B.11 permit application

**Response 47** - Please see response to comment 17.

**Fact Sheet Section III**

**Comment 48, Colorado Springs Utilities, Fact Sheet Section III**

Continue to Support Low Risk Discharge Guidance and Design Alternative Discharge Options to Complement the Guidance: Utilities' discharges from its Potable Water Distribution System (PWDS) are properly managed under the existing Low Risk Discharge Guidance (LRDG). We support continuation of this policy and request that permits that apply to PWDS be separated from permits for gas pipelines. Separate PWDS general permits, if needed, can be designed to complement the LRDG. A separate PWDS permit can address the following issues:

- **Pollutants of Concern:** The LRDG addresses chlorine, suspended solids and oil and grease. A PWDS general permit should clarify which pollutants of concern it is intended to address. This should account for typical PWDS pipeline materials.
- **Multiple Discharge Points and Emergency Discharges:** PWDS flushing can occur at multiple hydrants, based on public health requirements. While the LRDG supports this activity, a PWDS permit, if needed, should be developed to accommodate multiple discharge points and emergency operations.
- **Covered Activities:** The LRDG and PWDS permit, if needed, could clearly delineate which activities are usually covered.

**Response 48** - The Low Risk Discharge Guidance for discharges Potable Water continues to be an option for managing discharges of potable water from potable water distribution systems. Potential details related to development of an alternative general permit and/or any associated stakeholder process is outside of the scope of this permit and fact sheet, but the division has noted that the

utilities that submitted comments during the public notice period would prefer development of an alternative general permit.

#### **Fact Sheet Section IV**

##### **Comment 49, Colorado Springs Utilities, Fact Sheet Section IV.B**

Should read “Only those Permittees granted blanket coverage shall...” Is a discharge log required only of those permittees that choose the blanket coverage option?

**Response 49** - A statement has been added to the fact sheet to Section VI.A, Control Plan, to clarify that those permittees not granted blanket coverage are not required to maintain a discharge log. Those permittees granted blanket coverage will have the option of documenting the required information either in the Control Plan or in a discharge log.

##### **Comment 50, Colorado Springs Utilities, Fact Sheet Section IV.B**

Requiring permittees who opt for blanket coverage to maintain a discharge log increases administrative burdens and is an unnecessary duplication of information that would be included in the DMRs and provided in the application process.

**Response 50** - The items required by the renewed general permit to be documented in either the control plan or discharge log (source water, discharge point, receiving stream, and the method used to measure flow) may vary from project to project. This information is not required with the permit application for permittees requesting blanket coverage because this information is often not established at the time of application. Therefore, this requirement does not create a duplication of effort and is necessary in order to document and assess the activities performed under a blanket coverage authorization.

#### **Fact Sheet Section V**

##### **Comment 51, Colorado Springs Utilities, Fact Sheet Section V.B.1**

What is the maximum flow rate for either the intermittent and short-term discharges that would be of minimal impact to state waters?

**Response 51** - See the response to comment 3 for a discussion on the concept of a discharge de minimis.

##### **Comment 52, Colorado Springs Utilities, Fact Sheet Section V.B.4**

Does “approved chemical addition” include the chemical removal of residual chlorine from potable water discharges only, or does it include dechlorination of super chlorinated waters used in line disinfection?

**Response 52** - Potable water line disinfection activities will not be authorized under this general permit. Authorized chemicals are those chemicals requested for use by the permittee either in the permit application or a subsequent application supplement or modification request form, and that are approved by the division as documented in the certification fact sheet. An example of a request for chemical addition that was approved by the division in the previous permit term is the addition of chemical for dechlorination where the source water used in the activity was potable.

##### **Comment 53, Public Service Company of Colorado, Fact Sheet Section V.B.8**

The second paragraph of this section indicates that effluent limits may be included if water is withdrawn from a stream and discharged to a different stream if the transfer is from an impaired water to an unimpaired water. 40 CFR 122.3 lists the types of discharges that do not require a permit and discharges from a water transfer do not require a discharge permit (see 122.3(i)). Discharges from a water transfer includes activities that “conveys or connects waters of the United States without subjecting the

transferred water to intervening industrial, municipal, or commercial use. This exclusion does not apply to pollutants introduced by the water transfer activity itself to the water being transferred". For example, selenium is not a pollutant that is introduced in the course of performing a hydrostatic test. But there are streams in the State that are impaired for selenium. Based on the water transfer exclusion, it would not be appropriate to add an effluent limit for selenium, if the source of the hydrostatic test water is from a selenium impaired stream and the discharge is to an unimpaired stream. PSCo suggests that this paragraph be removed.

**Response 53** - Hydrostatic testing is an intervening industrial use, therefore, the activity is not merely conveying or connecting waters. Therefore, the activity does not meet the definition of a water transfer and this exclusion would not apply.

## **Fact Sheet Section VI**

### **Comment 54, Colorado Springs Utilities, Fact Sheet Section VI.A.2.f**

Clarify if maintaining records of inspection findings is only required for those permittees that opt for blanket coverage, since these entities would be required to document on discharge logs, per Section VI.A.2.f.

**Response 54** - As indicated in Section VI.A.2, the control measures listed in this section are examples of control measures provided by the division as requested by stakeholders. All permittees, not just those with blanket coverage, should implement control measures as necessary to maintain compliance with all permit conditions. Note that the list of control measures provided in this section is not an all inclusive list and a violation of an effluent limitation is a permit violation regardless of control measures implemented.